

ABSTRACT OF THE DISCLOSURE

A memory management unit (MMU) for a network switch fabric for forwarding data is disclosed. The MMU has an ingress port interface receiving portions of a data packet and an egress port interface, connected to ingress ports of the fabric through an ingress bus ring. The MMU also includes a cell packer, that groups packet data into cells and a packet pool memory, that stores cells received from the cell packer. The MMU also includes a cell unpacker, where the cell unpacker separates stored cells before releasing the cells to an egress port. The MMU also includes an egress scheduler communicating with the cell unpacker, where the egress scheduler determines which packet data should be retrieved from the packet pool memory according to priority rules. The priority rules can be a deficit round robin scheduling algorithm or a weighted round robin scheduling algorithm.